

Vertical Profiler

FREQUENTLY ASKED QUESTIONS

TECHNICAL DOCUMENT #E125

The following document highlights commonly asked questions regarding the YSI Vertical Profiler. For additional questions, visit ysi.com/vertical-profilers or contact us at +1.937.767.7241.

Can I put a profiler on my own platform or buoy?

Yes, however we do not recommend it since our platforms have been specifically designed to mount the profiler and maximize its functional capabilities and access for maintenance purposes. If you chose to mount the profiler to your platform, contact tech support and they can discuss your installation further.

What water quality sondes can I use with the Profiler?

The Vertical Profiler is designed to be used with the YSI 6-series and EXO sondes.

What is the Data Output Format?

A .dat file is what is created as an output file. This file is a comma separate file (.csv) and is easily opened in Excel. Other formats such as XML are supported.

How does the Profiler determine the depth of the water?

There are multiple ways. A floating Profiler can either use a user defined depth setting or a depth sounder. A Fixed Profiler can specifically use a reference sonde, or a radar level sensor.

What if I am using a Profiler in a body of water that is really deep?

A Profiler only measures to a maximum depth of 100 meters. If you are using the systems in a narrow channel of water which has steep sides, mooring will be particular critical to insure that the raft is not drifting over the profile point. If you are deploying the Profiler into a reservoir that has a false bottom or synthetic liner, the system's depth sounder may not work properly, so you would need to use other options to measure depth.

What if the system needs to operate in an environment that is particularly cloudy or cold, can we add extra power to the system?

A power upgrade package will provide two extra solar panels, a solar regulator, and an extra battery. We have found this package to provide the necessary power for customers in more demanding environments. Reducing the number of daily profiles and data transmission intervals will also extend your power reserve.

How close to the top and how close to the bottom can we reliably acquire data measurements?

1 meter from the bottom and 1 meter from the top.

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What is the wave energy can the profiler withstand?

You can refer to the website for specific product details.



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How much maintenance does the Profiler require?

This is really determined by your specific site conditions. Maintenance requirements for the Profiler itself are minimal, but the sonde and sensor payload will need careful attention. Maintenance for biofouling is determined by the environment into which it is being used. An average schedule for sonde maintenance is between once and twice a month. Solar panels should be cleaned at each site visit especially in areas with heavy bird populations.

What are the mooring options?

Standard mooring options include 1 point and 2 point moorings using a 135 lb. Dormor anchor, 8 ft. of chain, and special mooring rope that is 1.5 times your depth.

What equipment do I need to transport my Profiler?

The Pontoon Profiler can be moved using a standard flatbed trailer. The system can then be towed by a small boat to your deployment location once in the water.

Are there any hazard warning options that can be put on the Profiler?

Yes. Radar reflectors and high visibility LED beacons can be added for areas with navigable traffic.

Are there other sensors can be installed on the Profiler systems besides the water quality sondes?

Yes. There are a variety of standard MET: temperature, humidity sensors, wind, rain, PAR, and other specialized packages that can be added to your Profiler and integrated into your data acquisition output. Contact our systems team, they will be happy to customize - chances are, we have done it before.

How long does the standard power supply last?

How long the power lasts is dependent on your specific deployment location, how many times you profile per day, and how frequently you acquire and transmit data. Our systems support team will be able to provide you with the power you will need based on your requirement. We have options to increase the battery reserve and number of solar panels to match difficult environments.

Do I need to tow my system to shore in order to maintain it?

Not necessarily. A lot of maintenance can be done on the platform itself (Pontoon or Buoy). These platforms are very convenient and provide a comfortable space to work on.

Can I leave my system out year round?

Unless you have ice or extremely severe storms and weather conditions, your system can be continuously deployed and maintained.

What water quality measurements can I put on the sonde?

You can measure as many parameters as are available to be installed on the EXO sonde. Please refer to the website at www.ysi.com/EXO2 for more details.

Who else makes a Vertical Profiler?

The Vertical Profiler is a patented technology and is only available from YSI. We have been making these Profilers for the last 13 years and have over 200 worldwide that have been successfully deployed for years.

How much does a Profiler cost?

Cost is dependent on the configuration and payload needed to accomplish your monitoring needs. The basic Fixed Profiler starts at \$30,000. Call your YSI sales rep for a quote.

What is the warranty period?

The standard warranty is one year. Extended warranty packages are available.



What is the life expectancy for a Profiler? How long do they last?

Systems can be expected to last for up to 10 years with minimal maintenance.

What is the minimum depth the Profiler can operate in?

The Profiler can operate in at least 3 meters. We recommend at least three depth profile measurements to obtain the best use of a profiler.

How do I get service for my unit?

Our service tech support is available weekdays via phone or email. We also offer on-site maintenance contracts and extended support packages, however, we find that our customers, with proper training, can perform standard maintenance on their units. If you need us though, our support technicians are here to help.

Can my system be used in salt water?

Yes, of course.

How do I know if I am a potential customer for a Profiler?

Are you concerned about staff safety? Many of our customers do not want their staff to be out in the body of water (like a reservoir) taking manual water measurements as a safety concern. The Profiler will allow for more frequent and accurate water quality monitoring and at various water depths, continuously making the data available on your desktop or on the internet. Water treatment savings. Better control over the amount of water treatment needed as a result of automated monitoring results in significant savings. Overall savings and ROI. Time savings alone can translate to an ROI of as little as two years.

What is the minimum incremental distance between Profile measurements?

We recommend at least .5 meters, although the system can measure in .1 meter increments.

Is there data visualization software available for the Profiler?

Yes. Our sister company Hypack has created a package which allows you to graphically see your data in both linear and gradient displays. You can also navigate through the data by depth with a simple click. You can also embed code to a website to display the data. The website will update in real time. Contact your sales rep for a demo on ViPer software from Hypack.

Can a Profiler be installed on a dock or pier?

Yes, the Fixed Profiler configuration is designed for mounting on piers, bridges, dam or piling.

What data logger does the profiler use?

The standard system is equipped with a Campbell Scientific CR1000.



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